

WHAT IS CLAIMED IS:

1. An electrical connector, comprising:
a body with first and second end sections, a mid-section disposed between said first and second end sections, and a transition shoulder disposed between said first end section and said mid-section, said mid-section being radially larger than each of said first and second end sections and including an outer surface, said transition shoulder including a face wall extending between said outer surface of said mid-section and an outer surface of said first end section; and
a plurality of radial indicator ribs extending from said outer surface of said mid-section, each of said radial indicator ribs including an abutment surface laterally offset from said face wall of said transition shoulder and adapted to abut a portion of a mating electrical connector.
2. An electrical connector according to claim 1, wherein
each of said abutment surfaces of said radial indicator ribs forms a step with said face wall of said transition shoulder adapted to receive the portion of the mating electrical connector.
3. An electrical connector according to claim 1, wherein
each of said radial indicator ribs extends outwardly from said mid-section of said body radially beyond all portions of said body.
4. An electrical connector according to claim 1, wherein
each of said abutment surfaces of said radial indicator ribs are substantially perpendicular to said outer surface of said mid-section in transverse cross-section of said body.
5. An electrical connector according to claim 1, wherein
said body is formed of a dielectric material; and
said mid-section includes an outer conductive jacket.

6. An electrical connector according to claim 1, wherein each said radial indicator ribs is formed as a unitary one-piece member with said outer conductive jacket.

7. An electrical connector according to claim 1, wherein said mating electrical connector is a high voltage cable connector.

8. An electrical connector according to claim 1, wherein a ground connection is disposed on said mid-section spaced from each of said ribs for connecting said body to ground.

9. An electrical connector, comprising:
a body with first and second end sections, a mid-section disposed between said first and second end sections, and a transition shoulder disposed between said first end section and said mid-section, said mid-section being radially larger than each of said first and second end sections and including an outer surface, said transition shoulder including a face wall extending between said outer surface of said mid-section and an outer surface of said first end section; and

a radial indicator rib extending from said outer surface of said mid-section, said radial indicator rib including an abutment surface laterally offset from and substantially parallel to said face wall of said transition shoulder defining a step therebetween adapted to receive a portion of a mating electrical connector with substantially no space between the portion of the mating electrical connector and said abutment surface of said radial indicator rib.

10. An electrical connector according to claim 9, wherein a second radial indicator rib extends from said outer surface of said mid-section and includes an abutment surface laterally offset from said face wall of said transition shoulder.

11. An electrical connector according to claim 9, wherein the portion of the mating electrical connector abuts said abutment surface of said radial indicator rib.

12. An electrical connector according to claim 9, wherein
said radial indicator rib extends radially outwardly from said mid-section of said body
beyond all portions of said body.
13. An electrical connector according to claim 9, wherein
said mid-section includes an outer conductive jacket; and
said radial indicator rib forms a unitary one-piece member with said outer conductive
jacket.
14. An electrical connector according to claim 9, wherein
said mating electrical connector is a high voltage cable connector.
15. An electrical connector according to claim 9, wherein
a ground connection is disposed on said mid-section spaced from said rib for
connecting said body to ground.
16. An electrical connector assembly, comprising:
a first electrical connector including
a body with first and second end sections, a mid-section disposed between said
first and second end sections, and a transition shoulder disposed between said first end
section and said mid-section, said mid-section being radially larger than each of said first and
second end sections and including an outer surface, said transition shoulder including a face
wall extending between said outer surface of said mid-section and an outer surface of said
first end section, and
a radial indicator rib extending from said outer surface of said mid-section,
said radial indicator rib including an outer surface and an abutment surface laterally offset
from said face wall of said transition shoulder defining a step therebetween; and
a second electrical connector including a port receiving said first end section of said
first electrical connector and a cuff terminating said port, said cuff being received in said step

of said first connector with an end portion of said cuff in close proximity with said abutment surface of said radial indicator rib.

17. An electrical connector assembly according to claim 16, wherein a plurality of radial indicator ribs extend from said outer surface of said mid-section and each includes an abutment surface laterally offset from said face wall of said transition shoulder; and

each of said radial indicator ribs defining a step between said abutment surface and said face wall of said transition shoulder for receiving said cuff of said second electrical connector with a portion of said cuff abutting each of said abutment surfaces.

18. An electrical connector assembly according to claim 16, wherein said abutment surface of said radial indicator rib is substantially parallel to said face wall of said transition shoulder.

19. An electrical connector assembly according to claim 16, wherein said abutment surface of said radial indicator rib is disposed on a wall of said rib that extends radially outwardly from said mid-section beyond said cuff of said second electrical connector and beyond any portion of said first electrical connector.

20. An electrical connector assembly according to claim 16, wherein said cuff of said second electrical connector covers said step without covering said outer surface of said radial indicator rib.

21. An electrical connector assembly according to claim 16, wherein said radial indicator rib is molded to said mid-section of said first electrical connector.

22. An electrical connector assembly according to claim 16, wherein said first electrical connector is a high-voltage bushing insert and said second electrical connector is a high-voltage cable connector.

23. An electrical connector assembly according to claim 16, wherein a ground connection is disposed on said mid-section spaced from said rib for connecting said first electrical connector to ground.

24. A method of mating first and second electrical connectors, the first connector including first and second end sections with a mid-section therebetween and a transition shoulder disposed between the first end section and the mid-section, and the second connector including a port sized to accommodate the first end section of the first electrical connector and a cuff terminating the port, comprising the steps of:

inserting the first end of the first electrical connector into the port of the second electrical connector;

covering an outer surface of the transition shoulder of the first electrical connector with the cuff of the second electrical connector; and

placing an surface of the cuff of the second electrical connector in close proximity with an abutment surface of a radial indicator rib extending from an outer surface of the mid-section of the first electrical connector and laterally offset from the transition shoulder of the first electrical connector, thereby indicating proper mating between the first and second connectors.

25. A method of mating first and second electrical connectors according to claim 24, further comprising the step of

abutting the surface of the cuff of the second electrical connector with abutment surfaces of a plurality of radial indicator ribs, respectively, extending from the outer surface of the mid-section of the first electrical connector and are laterally offset from the transition shoulder of the first electrical connector.

26. A method of mating first and second electrical connectors according to claim 24, wherein

said first electrical connector is a high voltage bushing insert and said second electrical connector is a high voltage cable connector.